

Listing of Claims

This listing of claims represents the latest version of claims in the application.

1. (Previously Presented) An air conditioning system comprising a variable displacement compressor, a condenser, a normal charge-type expansion valve, and an evaporator, characterized in that said variable displacement compressor includes

a proportional flow rate control solenoid valve responsive to an external signal for changing an area of a discharge-side or suction-side refrigerant flow passage, and

a constant differential pressure valve for controlling a flow rate of

refrigerant introduced from a discharge chamber into a crank chamber or

refrigerant permitted to escape from said crank chamber to a suction chamber

such that a differential pressure developed across said proportional flow rate control solenoid valve is constant, to thereby control refrigerant delivered to said condenser to a constant flow rate.

2. (Withdrawn) An air conditioning system comprising a variable displacement compressor, a condenser, an expansion valve, and an evaporator,

characterized in that said variable displacement compressor includes a capacity control valve for controlling a flow rate of refrigerant introduced from a discharge chamber into a crank chamber or refrigerant permitted to escape from said crank chamber to a suction chamber, such that a differential pressure between a discharge pressure and a suction pressure becomes a constant differential pressure set by an external signal, and

that said expansion valve is a normal charge-type expansion valve.

3. (Withdrawn) An air conditioning system comprising a variable displacement compressor, a condenser, an expansion valve, and an evaporator,

characterized in that said variable displacement compressor includes a capacity control valve for controlling a flow rate of refrigerant introduced from a discharge chamber into a crank chamber or refrigerant permitted to escape from said crank chamber to a suction chamber, such that a differential pressure between a discharge pressure and a pressure in said crank chamber becomes a constant differential pressure set by an external signal, and

that said expansion valve is a normal charge-type expansion valve.